

**POLICY ISSUE**  
(Notation Vote)

July 19, 2004

SECY-04-0128

FOR: The Commissioners

FROM: Luis A. Reyes  
Executive Director for Operations /RA/

SUBJECT: AMENDMENT TO SECTION 274b AGREEMENT WITH THE STATE  
OF UTAH AND APPROVAL OF ALTERNATIVE GROUNDWATER  
STANDARDS

PURPOSE:

To request (1) a Commission determination that Utah's proposed alternative groundwater standards are adequate, and (2) Commission approval of the proposed amendment to the Agreement with the State of Utah for 11e.(2) byproduct material.

SUMMARY:

The staff has processed the request from former Governor Leavitt of Utah for an amendment to the Utah Agreement which would add authority for 11e.(2) byproduct material. The staff used the Office of State and Tribal Programs procedure for processing new Agreements. Utah proposed the use of alternative groundwater standards in lieu of the groundwater standards in Appendix A to 10 CFR Part 40. The Commission approved a parallel review process for the alternative standards review and the amendment to the Utah Agreement review. Both proposals were noticed in the Federal Register and the staff prepared an analysis of public comments for each proposal. The staff completed both review processes and is proposing the approval of Utah's alternative groundwater standards and the proposed amendment to Utah's Agreement.

CONTACT: Dennis M. Sollenberger, STP  
301-415-2819

BACKGROUND:

Former Governor Michael O. Leavitt of Utah requested that the Nuclear Regulatory Commission (NRC) enter into an amended Agreement under Section 274b of the Atomic Energy Act of 1954, as amended (Act), to transfer regulatory authority for 11e.(2) byproduct material to Utah. In its proposed regulations, Utah identified that it intends to use groundwater protection standards, which are based on the Environmental Protection Agency's (EPA) hazardous waste program, to protect the waters of the State from the hazardous constituents produced by uranium milling operations. To address this request, in SECY-03-0025, dated February 18, 2003, the staff presented the Commission with the staff's proposed definition of an alternative standard, a process to conduct the hearing required by Section 274o of the Act, and the staff's preliminary finding on Utah's proposed alternative standards. By Staff Requirements Memorandum (SRM) for SECY-03-0025, the Commission approved the staff's recommendation for addressing the three points in the paper. Subsequently, the staff published a Federal Register notice that presented the Commission's preliminary finding on the proposed Utah alternative standard (68 FR 51516, August 27, 2003) and offered an opportunity for the public to provide comments. The staff addressed several issues that were raised by a member of the public, and published a second Federal Register notice that provided additional information and extended the comment period (68 FR 60885, October 24, 2003).

In parallel, the staff evaluated the Final Application submitted by Governor Leavitt. The staff requested Commission approval in SECY-04-0008 dated January 26, 2004, to publish in the Federal Register the proposed amendment to the Utah Agreement and a summary of the draft staff assessment. By SRM SECY-04-0008 dated February 6, 2004, the Commission provided its approval. As required by Section 274e of the Act, the proposed amendment to the Agreement and the summary of the draft staff assessment were published in the Federal Register for four consecutive weeks (69 FR 7026, February 12, 2004), (69 FR 7803, February 19, 2004), (69 FR 8703, February 25, 2004), and (69 FR 10269, March 4, 2004). The full text of the draft staff assessment as well as all references in the assessment, were provided through the Agencywide Document Access and Management System (ADAMS).

The amendment to the Agreement (Attachment 1) allows Utah to assume regulatory authority over 11e.(2) byproduct material as well as the facilities that generate such material (e.g., uranium mills) and dispose of such material. In addition to the proposal for 11e.(2) byproduct material authority, the amendment to the Agreement document also includes the wording changes needed to reflect the return of the Sealed Source and Device Evaluation regulatory authority to NRC which was approved by the Commission in 1996. Thus, the amended Agreement would provide authority for Utah to regulate all categories of materials available to States under Section 274b of the Act, except as noted above, i.e., the authority to regulate Sealed Source and Device Evaluation.

DISCUSSION:

The processing of the public comments on the alternative standards and the amendment to the Utah Agreement as well as the other steps required to implement the amendment to the Agreement are discussed below.

(1) Public Comments

Public Comments on the Utah's Proposed Alternative Groundwater Standards

NRC staff received comment letters from three persons in response to the two Federal Register notices. Comments were made on: (1) Utah's alternative groundwater standards; (2) the alternative standards hearing process the NRC has chosen to comply with the requirement in Section 2740; and, (3) other issues.

Comments on Utah's Alternative Groundwater Standards:

A letter received from Vice President and General Counsel, International Uranium (USA) Corporation (IUSA), did not identify any concerns with the proposed Utah alternative standards as set out in Utah statutes and regulations. IUSA could not comment on the application of these standards to their facility until the negotiations on their groundwater discharge permit are completed. Utah and IUSA have been working on the groundwater discharge permit and have not identified any obstacles to completion.

A second letter was received from the Director, Office of Environmental Policy and Compliance, Fish and Wildlife Service (FWS), U.S. Department of Interior. The letter stated that the protection of groundwater should be equal to, or better than under NRC standards, and equal in protection under standards required by the EPA. The FWS also identified other issues: i.e., (1) the adequacy of the existing NRC and EPA standards to provide protection for trust resources (such as, migratory birds); (2) the fact that loads from discharges are not addressed, only concentrations; and, (3) the coordination on issues of concern to FWS under the amended Agreement, since Utah is not a FWS Federal partner. FWS stated that these issues can be addressed within the Utah program if Utah will consult with FWS regarding the possible impacts on natural resources, when applications for groundwater discharge permits are reviewed.

A third letter was received from an individual for the Nuclear Waste Committee, Glen Canyon Group/Sierra Club (NWC) which commented on the following areas pertaining to groundwater standards: (1) the definition of "point of compliance;" (2) the application of groundwater corrective action programs; (3) the application of groundwater detection monitoring; (4) the adequacy of Criterion 13's list of hazardous constituents in Appendix A to 10 CFR Part 40; and, (5) the belief that dependency of agency practice in implementation of such standards is as important as the standards themselves. The NWC's primary comment in each of these areas was that Utah should implement its standards in a manner that provides greater protection to members of the public and the environment than NRC's program has.

### Comments on the Alternative Standards Hearing Process:

The NWC also challenged the NRC process for conducting the public hearing required by Section 274o of the Act as a Subpart H like process. The NWC asserts that the NRC should establish this public hearing process through rulemaking. The staff responded to these issues in the second Federal Register notice and by letter dated December 19, 2003 (ML040560195). The staff sent a letter to the individual providing the comments for the NWC on June 21, 2004 (ML041770014) to close the request for motion and/or petition initially requested by letter dated September 8, 2003.

### Comments on Other Issues:

The NWC also raised several other issues including: (1) the process to be followed to determine when uranium mills may process alternate feed material; (2) whether NRC's environmental impacts statements adequately addressed the groundwater impact from alternate feed materials; (3) whether site-specific approvals for alternate feed materials constitute alternate standards; (4) issues raised in an EPA letter commenting on NRC's policies for alternate feed and direct disposal of non-11e.(2) material; and, (5) the Utah process for development of its policies in the Final Application for the amendment to its Agreement.

The staff's summary of comments and responses to each comment are included in Attachment 2. The staff believes, based on an overall evaluation of these comments, that those responding consider the Utah alternative groundwater standards to be equivalent or more stringent than the NRC requirements in Appendix A to 10 CFR Part 40.

### Public Comments on Utah's Proposed Amendment to the Agreement and the Draft Staff Assessment

NRC staff received one comment letter in response to the Federal Register notices published on February 12, 19, 25, and March 4, 2004. Comments were requested in two categories: (1) the proposed amendment to the Agreement; and, (2) the NRC staff's assessment of the Utah 11e.(2) byproduct material regulatory program.

The letter received from the individual representing the NWC provided comments in numerous areas which are discussed in the staff analysis of public comments (Attachment 3). The comments address the following issues: (1) the State did not use an open, public process in developing its background information paper on what discretionary elements of the NRC program should be included in the Utah program; (2) the State should make all records available to the public including indices of records in both electronic form and in a location near the licensed facilities; (3) the NRC and the State should address the pre-1978 sites that are not included by the Department of Energy (DOE) in the Title I program prior to the final approval of the amendment to the Agreement; (4) there needs to be a master list of sites and materials; (5) the State did not use a public participation process in the formulation of the State Policy in the "Elements Paper;" (6) the final application does not discuss what guidance, if any, would be used in evaluating applications to dispose of non-11e.(2) byproduct material in mill tailings impoundments; (7) it appears that NRC's interim guidance (Regulatory Issue Summary (RIS) 2000-23) has become final guidance; (8) who determines what material meets the definition of 11e.(2) byproduct material; (9) the NRC should resolve the issue of alternative groundwater

standards prior to closing the comment period on the amendment to the Agreement; (10) that Utah is modifying the statutory definition of “ore” by adopting the NRC policy for alternate feed in RIS 2000-23; (11) the State should make it clear that environmental impacts include cumulative impacts, evaluation of alternatives, and evaluation of environmental justice impacts to include impacts on the White Mesa Utes, Navajos, and low-income citizens; (12) the State should commit to notice all amendments and clarify what is a major or minor amendment; (13) the Velvet Mine Water Treatment Facility has been dropped by NRC and the State from the uranium recovery program and should be addressed; (14) the NRC and the State should conduct a comprehensive review of past regulatory program “mistakes and failures” in Utah to identify solutions so that future regulatory programs do not lead to “another incomplete and ineffective regulatory regime;” (15) the Congress has never delegated to EPA or NRC the authority to regulate the processing of material other than “ore” therefore, Utah can not assume regulatory authority for processing alternate feed material under this amendment to the Agreement, (16) Utah should amend its application to recognize that the State does not have authority over processing of material other than natural ore at uranium milling facilities and NRC should provide an opportunity for public comment on the revised application; and, (17) the public should be provided an opportunity to comment on the Final Application after the NRC responds to comments on the alternative standards proposal by Utah, the staff recommendations to the Commission, and the final Commission decision.

The staff responses to each of these comments are in Attachment 3. Each of these comments stressed its opposition to Utah allowing the processing of alternate feed materials as outlined in Commission policy, RIS 2000-23 (including the NRC definition of “ore”). The State of Utah has proposed to follow the alternate feed material policy in RIS 2000-23, but the State has chosen not to adopt the policy for disposal of non-11e.(2) byproduct material in tailings impoundments. The staff finds Utah’s proposed policy on use of a portion of RIS 2000-23 consistent with NRC policy and acceptable. The other primary comment expressed concern with the way NRC has conducted its licensing and inspection program in Utah and suggested that Utah should implement a more effective program than the NRC. As discussed in the staff’s final assessment of Utah’s proposed regulatory program for 11e.(2) byproduct material (Attachment 4, ML041940185), the staff has concluded that Utah’s program is adequate to protect public health, safety and the environment and compatible with NRC’s regulatory program.

## (2) Transfer of Licenses

Currently, there are four NRC 11e.(2) byproduct material licensees in Utah. The four licensees are three conventional uranium mills and one commercial 11e.(2) byproduct material disposal facility. The staff has been coordinating with Utah staff on the current or pending licensing, inspection, and enforcement activities involving the four 11e.(2) byproduct material licensees to be transferred, to ensure a smooth transition and continuation of regulatory actions after the transfer.

## (3) Actions Pending Against Licensees to be Transferred

There are no pending enforcement actions or ongoing investigations involving the four 11e.(2) byproduct material licensees in Utah.

#### (4) Effective Date of the Agreement

The NRC and Utah staffs have targeted August 15, 2004, as the effective date for the amendment to the Agreement. To meet this date and provide adequate time for an orderly transfer of files, and assumption of authority by Utah, staff requests Commission approval, if practical, by August 1, 2004.

#### (5) Procedure for Reviewing Proposed Agreements

Staff processed Utah's request for an amendment to Agreement using the procedure for reviewing proposed Agreements as described in the Office of State and Tribal Programs Procedure SA-700 dated April 2, 2001. The procedure directs the staff to use a self-directed team approach and to perform one comprehensive review of the application. The single comprehensive review was preceded by a team review of the draft application for completeness to ensure that the State had assembled the information required for the comprehensive review. The team members were represented by the Offices of State and Tribal Programs, Nuclear Material Safety and Safeguards, General Counsel, and Region IV.

#### IMPLEMENTATION:

Following the execution of the amendment to the Agreement, staff will continue a program of actively interacting with the State regarding Utah's regulation of 11e.(2) byproduct material. The NRC will exchange regulatory information, provide notices of NRC training courses, and conduct periodic on-site reviews of the State's program for regulation of 11e.(2) byproduct material. Communications are generally more frequent during the first years after an Agreement or amendment to an Agreement is signed. The regulatory information exchange includes reports of incidents, significant enforcement actions, and amendments to policies, regulations, or guidance.

An orientation meeting between NRC and Utah's Division of Radiation Control staff will be conducted as part of the next periodic meeting currently scheduled to occur in late FY 2005 to discuss the initial program implementation. Unless significant issues are identified, the first Integrated Materials Performance Evaluation Program (IMPEP) review of the 11e.(2) byproduct materials program is planned to be conducted as part of the next routine IMPEP review scheduled for FY 2007. Subsequent routine Agreement State program reviews usually occur at 12- to 48-month intervals, with good performance resulting in longer intervals between reviews.

If approved by the Commission, Utah will become the sixth Agreement State to have 11e.(2) byproduct material regulatory authority.

#### RESOURCES:

The shift in authority from NRC to the State of Utah was considered in the budget assumptions used to prepare the FY 2004 and FY 2005 budgets. No resource changes are required.

COORDINATION:

This paper has been coordinated with the Office of General Counsel, which has no legal objection. The office of the Chief Financial Officer has reviewed this paper for resource implications and has no objections. Staff has obtained concurrence from the Office of Management and Budget (OMB) that this action does not constitute a “major rule” under the Small Business Regulatory Enforcement and Fairness Act of 1996 (SBREFA).

RECOMMENDATIONS:

That the Commission:

1. Determine:

That the Utah proposed alternative standard for groundwater protection is equivalent to or more stringent than the NRC standards for 11e.(2) byproduct material.

2. Find:

- a. That the proposed Utah program for regulation of 11e.(2) byproduct material is compatible with the Commission’s program for the regulation of like material; and
- b. That the proposed Utah program for 11e.(2) byproduct material is adequate to protect public health, safety, and environment with respect to the materials and uses covered by the proposed amendment to the Agreement.

3. Approve:

- a. The proposed amendment to the Utah Agreement between Utah and the NRC pursuant to Section 274 of the Act, as set forth in Attachment 1.
- b. The proposed amendment to the Agreement by August 1, 2004, if practicable, to afford adequate time for the signing of the amendment to the Agreement, the orderly transfer of license files, and the assumption of regulatory authority by Utah on August 15, 2004.

4. Note:

- a. The Secretary will publish in the Federal Register the Commission’s final determination on the alternative groundwater standards (Attachment 5).
- b. The Governor of Utah does not desire to sign the amendment to the Agreement in a formal ceremony. Three formal copies of the Agreement will be provided, upon approval by the Commission, for signature by the Chairman and the Governor of Utah (Attachment 6).

- c. Pursuant to the Act, Small Business Regulatory Enforcement Fairness Act, and Commission guidance, the NRC oversight committees of the U.S. House of Representatives and of the U.S. Senate, and the Utah Congressional delegation, and certain Federal agencies be informed of the Commission's decision.
- d. The Office of Public Affairs will issue a press release.
- e. The text of the amendment to the Agreement will be published in the Federal Register as required by Section 274e, within 30 days after the amendment to the Agreement is signed (Attachment 7).

***/RA Ellis W. Merschoff Acting for/***

Luis A. Reyes  
Executive Director  
for Operations

Attachments:

- 1. Proposed Amendment to the Agreement
- 2. Staff Analysis of Public Comments on Utah's Alternative Groundwater Standards
- 3. Staff Analysis of Public Comments on Utah's Proposed Amendment to the Agreement
- 4. Final NRC Staff Assessment of the Utah 11e.(2) Program
- 5. Draft Federal Register Notice of the Commission's Determination on Utah's Proposed Alternative Standards
- 6. Draft Letter to Utah Governor Walker
- 7. Draft Federal Register Notice of the Signing of the Amendment to the Agreement

AMENDMENT TO AGREEMENT  
BETWEEN  
THE UNITED STATES NUCLEAR REGULATORY COMMISSION  
AND THE  
STATE OF UTAH  
FOR  
DISCONTINUANCE OF CERTAIN COMMISSION REGULATORY AUTHORITY  
AND  
RESPONSIBILITY WITHIN THE STATE PURSUANT TO  
SECTION 274 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED

WHEREAS, the United States Nuclear Regulatory Commission (hereinafter referred to as the Commission) entered into an Agreement on March 29, 1984 (hereinafter referred to as the Agreement of March 29, 1984) with the State of Utah under Section 274 of the Atomic Energy Act of 1954, as amended (hereinafter referred to as the Act) which became effective on April 1, 1984, providing for discontinuance of the regulatory authority of the Commission within the State under Chapters 6, 7, and 8 and Section 161 of the Act with respect to byproduct materials as defined in Section 11e.(1) of the Act, source materials, and special nuclear materials in quantities not sufficient to form a critical mass; and

WHEREAS, the Commission entered into an amendment to the Agreement of March 29, 1984 (hereinafter referred to as the Agreement of March 29, 1984, as amended) pursuant to the Act providing for discontinuance of regulatory authority of the Commission with respect to the land disposal of source, byproduct, and special nuclear material received from other persons which became effective on May 9, 1990; and

WHEREAS, the Governor requested, and the Commission agreed, that the Commission reassert Commission authority for the evaluation of radiation safety information for sealed sources or devices containing byproduct, source or special nuclear materials and the registration of the sealed sources or devices for distribution, as provided for in regulations or orders of the Commission; and

WHEREAS, the Governor of the State of Utah is authorized under Utah Code Annotated 19-3-113 to enter into this amendment to the Agreement of March 29, 1984, as amended, between the Commission and the State of Utah; and

WHEREAS, the Governor of the State of Utah has requested this amendment in accordance with Section 274 of the Act by certifying on January 2, 2003 that the State of Utah has a program for the control of radiological and non-radiological hazards adequate to protect the public health and safety and the environment with respect to byproduct material as defined in Section 11e.(2) of the Act and facilities that generate this material and that the State desires to assume regulatory responsibility for such material; and

WHEREAS, the Commission found on [date] that the program of the State for the regulation of materials covered by this amendment is in accordance with the requirements of the Act and in all other respects compatible with the Commission's program for the regulation of byproduct material as defined in Section 11e.(2) and is adequate to protect public health and safety; and

WHEREAS, the State and the Commission recognize the desirability and importance of cooperation between the Commission and the State in the formulation of standards for protection against hazards of radiation and in assuring that the State and the Commission programs for protection against hazards of radiation will be coordinated and compatible; and

WHEREAS, this amendment to the Agreement of March 29, 1984, as amended, is entered into pursuant to the provisions of the Act.

NOW, THEREFORE, it is hereby agreed between the Commission and the Governor of the State, acting on behalf of the State, as follows:

Section 1. Article I of the Agreement of March 29, 1984, as amended, is amended by adding a new paragraph B and renumbering paragraphs B through D as paragraphs C through E. Paragraph B will read as follows:

"B. Byproduct materials as defined in Section 11e.(2) of the Act;"

Section 2. Article II of the Agreement of March 29, 1984, as amended, is amended by deleting paragraph E and inserting a new paragraph E to implement the reassertion of Commission authority over sealed sources and devices to read:

"E. The evaluation of radiation safety information on sealed sources or devices containing byproduct, source, or special nuclear materials and the registration of the sealed sources or devices for distribution, as provided for in regulations or orders of the Commission."

Section 3. Article II of the Agreement of March 29, 1984, as amended, is amended by numbering the current Article as A by placing an A in front of the current Article language. The subsequent paragraphs A through E are renumbered as paragraphs 1 through 5. After the current amended language, the following new Section B is added to read:

"B. Notwithstanding this Agreement, the Commission retains the following authorities pertaining to byproduct material as defined in Section 11e.(2) of the Act:

1. Prior to the termination of a State license for such byproduct material, or for any activity that resulted in the production of such material, the Commission shall have made a determination that all applicable standards and requirements pertaining to such material have been met;
2. The Commission reserves the authority to establish minimum standards governing reclamation, long-term surveillance or maintenance, and ownership of

such byproduct material and of land used as a disposal site for such material. Such reserved authority includes:

- a. The authority to establish terms and conditions as the Commission determines necessary to assure that, prior to termination of any license for such byproduct material, or for any activity that results in the production of such material, the licensee shall comply with decontamination, decommissioning, and reclamation standards prescribed by the Commission; and with ownership requirements for such materials and its disposal site;
- b. The authority to require that prior to termination of any license for such byproduct material or for any activity that results in the production of such material, title to such byproduct material and its disposal site be transferred to the United States or the State of Utah at the option of the State (provided such option is exercised prior to termination of the license);
- c. The authority to permit use of the surface or subsurface estates, or both, of the land transferred to the United States or the State pursuant to 2.b. in this Section in a manner consistent with the provisions of the Uranium Mill Tailings Radiation Control Act of 1978, as amended, provided that the Commission determines that such use would not endanger public health, safety, welfare, or the environment.
- d. The authority to require, in the case of a license for any activity that produces such byproduct material (which license was in effect on November 8, 1981), transfer of land and material pursuant to paragraph 2.b. in this Section taking into consideration the status of such material and land and interests therein, and the ability of the licensee to transfer title and custody thereof to the United States or the State;
- e. The authority to require the Secretary of the Department of Energy, other Federal agency, or State, whichever has custody of such byproduct material and its disposal site, to undertake such monitoring, maintenance, and emergency measures as are necessary to protect public health and safety, and other actions as the Commission deems necessary; and
- f. The authority to enter into arrangements as may be appropriate to assure Federal long-term surveillance or maintenance of such byproduct material and its disposal site on land held in trust by the United States for any Indian Tribe or land owned by an Indian Tribe and subject to a restriction against alienation imposed by the United States.”

Section 4. Article IX of the 1984 Agreement, as amended, is renumbered as Article X and a new Article IX is inserted to read:

“ARTICLE IX

In the licensing and regulation of byproduct material as defined in Section 11e.(2) of the Act, or of any activity which results in the production of such byproduct material, the State shall comply with the provisions of Section 274o of the Act. If in such licensing and regulation, the State requires financial surety arrangements for reclamation and or long-term surveillance and maintenance of such byproduct material:

- A. The total amount of funds the State collects for such purposes shall be transferred to the United States if custody of such byproduct material and its disposal site is transferred to the United States upon termination of the State license for such byproduct material or any activity that results in the production of such byproduct material. Such funds include, but are not limited to, sums collected for long-term surveillance or maintenance. Such funds do not, however, include monies held as surety where no default has occurred and the reclamation or other bonded activity has been performed; and
- B. Such surety or other financial requirements must be sufficient to ensure compliance with those standards established by the Commission pertaining to bonds, sureties, and financial arrangements to ensure adequate reclamation and long-term management of such byproduct material and its disposal site.”

This amendment shall become effective on [insert date] and shall remain in effect unless and until such time as it is terminated pursuant to Article VIII of the Agreement of March 29, 1984, as amended.

Done at Rockville, Maryland, in triplicate, this [day] day of [month, year].

FOR THE UNITED STATES  
NUCLEAR REGULATORY COMMISSION

\_\_\_\_\_  
Nils J. Diaz, Chairman

Done at Salt Lake City, Utah, in triplicate, this [day] day of [month, year].

FOR THE STATE OF UTAH

\_\_\_\_\_  
Olene S. Walker, Governor

STAFF ANALYSIS OF PUBLIC COMMENTS  
ON UTAH'S PROPOSED ALTERNATE GROUNDWATER STANDARD

INTRODUCTION:

NRC staff received comments from three commenters in response to the notices NRC published in the Federal Register informing the public that Utah has proposed an alternative standard for implementing its groundwater protection program for 11e.(2) byproduct material. The proposed alternative standard was submitted in support of Utah's application to amend the Section 274 of the Atomic Energy Act of 1954, as amended, (AEA) Agreement with NRC, adding additional authority for 11e.(2) byproduct material. The first notice was published in the Federal Register on August 27, 2003 and a supplemental notice with an extension of the comment period was published on October 24, 2003. The first notice requested comments specifically addressing the question: "Does the Utah alternative standard achieve a level of stabilization and containment of the sites concerned, and a level of protection for public health, safety and the environment from radiological and non-radiological hazards associated with such sites, which is equivalent to, to the extent practicable, or more stringent than the level which would be achieved by standards and requirements adopted and enforced by the Commission for the same purpose and any final standards promulgated by the Administrator of the Environmental Protection Agency in accordance with section 275?"

The Federal Register notice also informed the public that the Commission intends to fulfill both the notice and opportunity for public hearing provisions of Section 274o of the AEA through the Federal Register notice. Due to questions on the electronic availability of two documents that were referenced in the first notice and questions regarding the notice and hearing process requirements, the staff published a clarifying notice on October 24, 2003 and extended the comment period for an additional 30 days.

COMMENTS ON THE PROPOSED ALTERNATIVE STANDARDS FOR GROUNDWATER PROTECTION:

Comments regarding the proposed alternative groundwater standards in Utah are presented below by commenter.

Commenter:  
David C. Fryenlund  
(ML032720676)

Affiliation:  
Vice President and General Counsel, International Uranium (USA) Corporation (IUSA), Operators of the White Mesa Uranium Mill, e-mail dated September 25, 2003.

**Summary of Comments:**

At this time, IUSA is not concerned with the proposed Utah alternative standards as set out in the Utah statutes and regulations. IUSA cannot comment on how these standards will be applied generally, or specifically to the White Mesa mill, until the groundwater discharge permit for the mill has been finalized. IUSA is in the process of working with Utah on their groundwater discharge permit which IUSA understands must be in effect upon Utah becoming an Agreement

State for uranium recovery facilities. IUSA has advised the NRC staff that it may have some future comments on the proposed Utah alternative standard once it has had a chance to review the form of groundwater discharge permit that will be proposed by the State for their mill.

**NRC Staff Response:**

While the State is working with IUSA on the groundwater discharge permit for this mill, the current NRC license including groundwater requirements in license conditions will be transferred to Utah. Utah is required by statute to implement the NRC license requirements until they are specifically modified by Utah. Therefore, the IUSA discharge permit activities and status are independent of the Agreement amendment process.

Commenter:  
Willie R. Taylor  
(ML032820353)

Affiliation:  
Director, Office of Environmental Policy and Compliance, U.S.  
Fish and Wildlife Service (FWS), U.S. Department of Interior,  
letter dated September 26, 2003.

**Summary of Comments:**

The FWS has no comments on the particular issue in that groundwater under direction of Utah Department of Environmental Quality (UDEQ) for uranium mill tailings sites will be regulated in the same manner and under the same standards as groundwater in the remainder of Utah. Therefore, the protection of groundwater should be at least equal to, or better than the protection afforded under NRC standards. Additionally, groundwater protection standards should be equivalent to the Environmental Protection Agency's (EPA) standards for 11e.(2) byproduct material.

The FWS identified other issues: (1) the adequacy of the existing NRC and EPA standards to provide protection for trust resources (such as, migratory birds); (2) loads from discharges are not addressed, only concentrations; and (3) the coordination on issues of concern to FWS under the amended Agreement because Utah is not a Federal partner. FWS stated that these issue can be addressed within the Utah program if Utah consults with FWS when applications for groundwater discharge permits are reviewed for possible impacts on resources.

**NRC Staff Response:**

FWS' comments focused on other issues than the Utah proposed alternative groundwater standard. FWS requested that Utah work cooperatively with FWS in issuing their groundwater discharge permits to ensure that Utah's actions will consider possible impacts to endangered species, migratory birds, and compliance with Section 404 of the Clean Water Act. FWS stated that they believe provisions exist in Utah's regulations to address these problems should they arise, especially if a strong degree of coordination continues between UDEQ and the FWS.

Commenter:  
Sarah M. Fields  
(ML033420067)

Affiliation:  
Nuclear Waste Committee, Glen Canyon Group/Sierra Club,  
Moab, Utah, letter dated November 21, 2003.

### **Summary of Comments:**

The commenter provided comments in several areas which will be summarized and responded to for each area of comment.

**Summary of Comment:** Utah's groundwater program requirements, Point of Compliance. The commenter states that NRC implements this requirement at only one location at a site. The commenter stated that, in order to protect the groundwater, more than one "point of compliance" might be necessary, and no potential source of contamination should be ignored. The commenter states that Utah should have a regulatory practice that is more comprehensive and effective than the NRC practice.

### **NRC Staff Response:**

NRC staff believe that both NRC's and the State of Utah's programs address the commenter's concern. Under NRC's regulatory program, several wells are usually used to establish the "point of compliance" at its uranium milling facilities. The Utah regulations and practice in its current discharge permits also implement several wells that make up the "point of compliance" in the same manner as in the NRC program. The NRC implements, as does Utah, the concept of a plane from the ground surface down through the uppermost aquifer that defines the "point of compliance." Each monitoring plan must consider site-specific conditions. The Utah and NRC programs are consistent in definition and in general implementation.

**Summary of Comment:** 10 CFR Part 40, Appendix A, Criterion 5D and 5F, Groundwater Corrective Action Program. The commenter stated that NRC's implementation of these criteria has not been effective in at least one case in Utah. The commenter stated that NRC should not allow Utah to implement these criteria in the same manner, but should require Utah to implement corrective action programs that clean up the contaminated groundwater and prevent further seepage from existing impoundments.

### **NRC Staff Response:**

The NRC expects Utah to implement an effective groundwater corrective action program which includes requirements that limit seepage from impoundments. The specific case cited by the commenter (the Moab Mill site) was a legacy site that experienced groundwater issues prior to the enactment of the Uranium Mill Tailings Radiation Control Act (UMTRCA) and the NRC's current regulations implementing UMTRCA. Therefore, the Moab site should not be used as a measure of effectiveness of these criteria. Groundwater corrective action programs for existing contamination take a considerable amount of time to implement. This process requires limiting the source of contamination (reclaiming the tailings impoundment). Remediation of the Moab Mill site, including groundwater remediation, was in progress when Congress transferred the site to the Department of Energy (DOE), as an UMTRCA Title I site, for final reclamation.

**Summary of Comment:** 10 CFR Part 40, Appendix A, Criterion 7A, Groundwater Detection Monitoring. The commenter refers to NRC's past failures to detect sources of contamination at the Moab Mill and suggests that the State should implement a program that does a better job of detecting sources of groundwater contamination.

**NRC Staff Response:**

As discussed in the response to the previous comment, the Moab mill site is a legacy site that experienced groundwater issues prior to the enactment of UMTRCA and NRC's current regulations. Therefore, the Moab site should not be used as a measure of the effectiveness of Criterion 7A.

Like current NRC regulations addressing groundwater protection standards issued pursuant to UMTRCA which have proven to be effective, the Utah groundwater protection program is designed to detect all sources of contamination whether from impoundments or from other sources on the site.

**Summary of Comment:** 10 CFR Part 40, Appendix A, Criterion 13, Hazardous Constituents. The commenter stated that it should be understood that, when the constituents listed in Criterion 13 were developed, they did not contemplate the receipt, processing, and disposal of wastes from mineral processing facilities (including contaminated soils from other sources) at licensed uranium and thorium mills.

**NRC Staff Response:**

The basis for the Criterion 13 list was a result of EPA's rulemaking in 1983 as required by Section 275 of the AEA and it is a comprehensive standard. Criterion 13 included the entire list of hazardous constituents in EPA's hazardous waste regulations at that time. The EPA included these constituents because it believed that, if any of these hazardous constituents were present in the ore or added as a result of the processing of the ore for its source material content, the constituents should meet the same standard as a hazardous waste disposal site. The groundwater protection standard issued by EPA uses either the drinking water standard or the hazardous waste environmental standards which are independent of the source of the hazardous material.

**Summary of Comment:** Conclusion by Commenter. The effective protection of the groundwater from activities at uranium and thorium recovery facilities is greatly dependent upon agency practice. For the State to have a program that successfully implements NRC or alternative groundwater standards, it must develop agency practices that are far more effective than previous NRC agency practices.

**NRC Staff Response:** The commenter does not raise any comments on the Utah alternative groundwater standards, but commented that Utah needs to do a better job of implementing groundwater standards than NRC has done. The State of Utah plans to work with the current licensees to limit future seepage from existing and new sites and to complete the remediation of any current groundwater contamination.

Other Comments Not Directly on the Utah Alternative Groundwater Standards:

**Summary of Comment:** (Page 1 and 17 of November 21, 2003 letter) Although the commenter provided the above comments on Utah's Alternative Groundwater Standards, the commenter believes that the NRC has not properly established procedures for providing a

“public hearing” and has not provided an opportunity for a “public hearing” in accordance with the alternative standards provision in Section 274o of the Act.

**NRC Staff Response:**

The staff proposed and the Commission approved the notice and comment process (a 10 CFR Part 2, Subpart H-like process) as meeting the Section 274o notice and opportunity for public hearing requirement. The staff proposed this process as one which meets the requirement in Section 274o of the AEA based on the fact that alternative standards (either generic or site-specific) must go through a public hearing process in the respective Agreement State under its administrative process that requires a public hearing addressing the basic health, safety and environmental concern with the State standard. The issue to be addressed in the public hearing specified in Section 274o is whether the State’s proposed alternative standard is equivalent to or more stringent than the NRC regulations which implement EPA standards as required by UMTRCA. The staff believes that the notice and public comment process appropriately accomplishes these requirements.

Procedural Comments on the Alternative Standards Hearing Process:

**Summary of Comment:** (Page 2 of November 21, 2003 letter) The commenter sent several submittals to the Commission (September 8, 2003, ML032720672; September 24, 2003, ML032750048 ; and October 28, 2003, ML033140034) in response to the Federal Register notice of August 27, 2003 (68 FR 51516). The initial submittal plus the two supplements were requests for a 10 CFR 2.808 Motion or a 10 CFR 2.802 Petition. The commenter asserts that she has not received a response to the motion/petition. The October 24, 2003 Federal Register notice (68 FR 60885) addressed a few of the issues brought to the Secretary’s attention in the September submittals; however, there was no statement in the October 24 notice indicating that it was in any way connected to or responsive to the September submittals. On October 26, 2003, the commenter sent an e-mail to the Contact included in the September 24 Federal Register notice asking for further information. The commenter remarked that she had not received a response by the November 21, 2003 date; therefore, those comments are included in the November 21, 2003 submittal.

The commenter stated that NRC is purposefully and illegally circumventing the provisions of the Administrative Procedures Act by not issuing a rule, regulation, or order announcing the establishment of procedures implementing the alternative standards provision of Section 274o and by not providing an opportunity for the public to comment on the notice of such rule, regulation, or order. The commenter asserted that this causes public trust in the NRC to go down another notch.

**NRC Staff Response:**

The staff addressed the specific questions listed in Section 1.2 of the commenter’s November 21, 2003 letter in our December 19, 2003 response to her October 29, 2003 e-mail to Dennis Sollenberger (ML040560195).

The staff proposed and the Commission approved the use of a 10 CFR Part 2, Subpart H-like process (notice and comment) to collect the public’s view on the adequacy of a State’s

proposed alternative standard. The Commission's determination required in Section 274o of the Act is a rulemaking-like approval. Since the Subpart H process is a public hearing process and the determination to be made is a rulemaking like decision, no change to the existing rule was necessary to accomplish this action. The NRC staff separately addressed the issues of the 2.802 Petition and the 2.808 Motion and sent the commenter a letter dated June 21, 2004 (ML041770014).

#### Environmental Analysis:

**Summary of Comment:** (starting on page 4 and running through page 13) The commenter focused on the references used in the Federal Register notice and their applicability to the proposed alternative groundwater standards proposed by Utah. The question raised is whether the generic environmental analyses contemplate the type of activities at licensed uranium recovery facilities that the State of Utah proposes to regulate under the proposed alternative groundwater standards. The commenter went on to discuss in detail issues with processing alternate feed material at licensee uranium mills.

#### **NRC Staff Response:**

The NRC considers alternate feed material to be a type of ore and, as such, when it is processed primarily for its source material content, that process produces 11e.(2) byproduct material. The NRC and the EPA evaluated the processing of any ore for its source material content in their respective Generic Environmental Impact Statements (GEISs). The evaluations were based on the safe levels of contaminants that uranium mills could release from their operations. The NRC approval of alternate feed material requires the uranium mills to maintain their compliance with the limits established based on these analyses. There is no alternative standard being applied when alternate feed material is approved for processing at a uranium mill.

**Summary of Comment:** (Page 13, Section 2.7) The commenter stated that the State of Utah intends to consider requests to permit the processing of alternate feed materials other than "natural ores" on a site-specific basis. The commenter stated that approval of such activities would constitute the application of site-specific "alternate standards" and would require an NRC notice and opportunity for public hearing under the alternative standards provisions of Section 274o.

#### **NRC Staff Response:**

Utah has proposed to conduct its regulatory program consistent with the current NRC program with the exception of the proposal to apply alternative groundwater standards. Whether Utah approves alternate feed material or not is a policy determination by the State of Utah. In either case, Utah's program would be subject to the same standards. The case-specific approval practice is currently being used by NRC to determine that the material being processed will not cause the site to violate the license requirements and to determine the adequacy of the monitoring program given the change in the ore to be processed. Utah has stated that they intend to treat the approval of alternate feed material as a major amendment under Utah's licensing procedures. Amendments to approve alternate feed material are not considered by NRC as an alternative standards action and, therefore, are not subject to the Section 274o

notice and public hearing provision. The issue of alternate feed material is discussed further in the comments on Utah's amendment to its Agreement.

**Summary of Comment:** (Page 14, Section 2.8) The commenter refers to issues raised in an EPA letter which addressed the disposal of materials not physically, chemically, and radiologically similar to the mill tailings in the impoundments.

**NRC Staff Response:**

The issues in the EPA letter were addressed by the NRC staff in the development of the final Regulatory Issue Summary 2000-23. The Utah alternative groundwater standards include the current list of hazardous constituents as promulgated by EPA, and, therefore, Utah in its alternative standard will require consideration of any of these constituents in the implementation of the groundwater monitoring, corrective actions, and compliance with their standards. Utah is requiring approval of each proposal to process alternate feed material. Such proposals would be approved of as a major amendment which requires an environmental assessment.

**Summary of Comment:** (Page 15, Section 3) The commenter discusses the State of Utah process that was used to develop the "Description of the proposed Utah Groundwater Program for uranium mills and tailings" which was included in the Final Application. The commenter stated that important "stakeholders" were not invited to participate in the task force that developed the uranium milling program documents. There were no citizen members, environmental group representatives, representatives of the town of Bluff, and no members of the tribal communities near the uranium milling sites. Meetings of the task force were all held in Salt Lake City, not near any of the uranium mills or the disposal site. There were not any local notices about the task force meetings and the task force did not seek community input on the questions before it. It was not a fair process. The task force was not an appropriate vehicle for public participation in the establishment of Utah's Agreement State uranium milling program.

**NRC Staff Response:**

The NRC does not have any specific criteria relating to how States develop general policy statements. The process used by a State in developing its program and policies should be conducted in accordance with that State's procedures. The minutes for the task force meetings and the progress of the task force were tracked by Utah's Radiation Control Board (see Board agendas) as reflected by the postings on Utah's Division of Radiation Control web site. The meetings were all open to the public.

STAFF ANALYSIS OF PUBLIC COMMENTS ON  
UTAH'S PROPOSED AMENDMENT TO THE AGREEMENT BETWEEN  
THE STATE OF UTAH AND THE U.S. NUCLEAR REGULATORY COMMISSION

INTRODUCTION:

NRC staff received comments from one person in response to the four notices that Utah was proposing to amend the Agreement between the State of Utah and the U.S. Nuclear Regulatory Commission to authorize Utah to regulate 11e.(2) byproduct material and the facilities that generate such material. In accordance with Section 274e, the proposed amendment to the Agreement and a summary of the staff assessment of Utah's application were published for four consecutive weeks in the Federal Register (69 FR 7026, February 12, 2004; 69 FR 7803, February 19, 2004; 69 FR 8703, February 25, 2004; and 69 FR 10269, March 4, 2004).

COMMENTS ON THE PROPOSED AMENDMENT TO THE AGREEMENT AND THE DRAFT STAFF ASSESSMENT OF THE UTAH 11e.(2) BYPRODUCT MATERIAL PROGRAM

Comments regarding the proposed amendment and draft staff assessment have been summarized and responses provided below.

Commenter:

Sarah M. Fields  
(ML040780577 and ML040780567)

Affiliation:

Nuclear Waste Committee (NWC), Glen Canyon  
Group/Sierra Club, Moab, Utah

**Summary of Comment:** The State has not used an open, public process for the development of the Elements paper by the DEQ task force. Environmental and public interest groups were excluded from the DEQ task force and they did not hold public meetings in the vicinity of the 11e.(2) facilities.

**NRC Staff Response:**

The NRC does not have any specific policy on the process a State uses to develop its basis for a decision whether to pursue an agreement with the NRC.

**Summary of Comment:** The State should make all records available to the public including indices of records in both electronic form and in locations near the licensed facilities. The State should not just rely on the Utah Government Records Access and Management Act (GRAMA) to provide the public with access to licensing documents. The NRC should make sure that the State has the staff and monetary resources to provide the public with licensing records in a timely manner, convenient for use.

**NRC Staff Response:**

The NRC requirement is to make the licensing and inspection records available to the public. The NRC policy does not specify how this is to be accomplished. The State's policy should be followed. The current State process under GRAMA meets NRC's policy requirements for access to licensing and inspection records.

**Summary of Comment:** The NRC and the State should address the pre-1978 sites that are not included in the Uranium Mill Tailings Radiation Control Act (UMTRCA), Title I program prior to the final approval of the amended agreement.

**NRC Staff Response:**

The amendment to the Agreement is for 11e.(2) byproduct material (Title II program) and is not applicable to pre-1978 tailings or residual materials covered by the Title I program. The Department of Energy is the Federal agency that is responsible for designating sites to be remediated under Title I of UMTRCA and for adding sites to the Formerly Utilized Sites Remedial Action Program (FUSRAP). If the materials at the sites listed by the commenter have material that is greater than 0.05% weight uranium, they would already fall under the current Utah program as source material. The sites could be considered naturally occurring radioactive material (NORM) sites which are not covered by the amendment to the Agreement.

**Summary of Comment:** There needs to be a master list of sites and materials at those sites that the State proposes to assume responsibility for as an Agreement State.

**NRC Staff Response:**

The final application identified the sites affected by the proposed amendment to the Agreement. The four licensed sites are: Rio Algom, Lisbon site; Plateau Resources, Shootaring Canyon site; International Uranium (USA) Corporation, White Mesa site; and Envirocare, 11e.(2) disposal cell at the Clive site.

**Summary of Comment:** The State of Utah did not use a public participation process in the formulation of the State Policy guidance as presented in the "Elements Paper" in particular the policy on alternate feed material.

**NRC Staff Response:**

The formulation process for the State of Utah policies on what program elements it wishes to incorporate into its radiation control program is a State decision that is not subject to criteria in NRC policy for entering into an Agreement. The NRC criteria apply to the State process for incorporating requirements into its regulations or license conditions. NRC reviewed and found acceptable the State administrative process in its regulations for the development of regulations and license conditions. The State public participation process for the development of regulations and license conditions is similar to that of NRC and is acceptable.

**Summary of Comment:** The Final Application does not discuss what guidance, if any, would be used in evaluating applications to dispose of non-11e.(2) byproduct material in 11e.(2) byproduct material impoundments or whether such applications would even be considered by the State. The Final Application should have addressed this matter.

**NRC Staff Response:**

The State did not discuss the direct disposal policy in Regulatory Issue Summary (RIS) 2000-23 in the Final Application because the State had decided that it would not allow such disposals in

11e.(2) byproduct material impoundments. The State could at a later date decide to change its policy on direct disposal of non-11e.(2) material into 11e.(2) byproduct material impoundments.

**Summary of Comment:** The interim guidance has become final guidance since NRC no longer intends to pursue rulemaking to issue a new Part 41 for uranium milling which was to address the issues in RIS 2000-23.

**NRC Staff Response:**

Since the Commission decided not to pursue the Part 41 rulemaking, the guidance in RIS 2000-23 is final guidance. The NRC staff has been using and will continue to use this guidance in the conduct of the uranium milling licensing program. The State chose to adopt the alternate feed policy and to not adopt the disposal of non-11e.(2) material in 11e.(2) byproduct material impoundments.

**Summary of Comment:** The State and NRC have not discussed who has the authority to determine whether material in Utah or material that will be disposed of in Utah meets the definition of 11e.(2) byproduct material, once the State assumes regulatory responsibility.

**NRC Staff Response:**

When material is generated in Utah, Utah will have the relevant documentation regarding how the material was produced and will make the determination. If the material is from another jurisdiction (either NRC or an 11e.(2) Agreement State), that jurisdiction will make the determination. Once a jurisdiction has determined that a material is 11e.(2) byproduct material, the other jurisdictions should defer to that determination.

**Summary of Comment:** The NRC has not resolved the issue of the State's request to substitute State groundwater protection standards for NRC standards. The public should have had access to NRC staff responses to the comments on the Utah's proposal and the staff assessment, staff recommendations to the Commission, and the Commission's decision, prior to the noticing of comment on the Final Application. The commenter requested that the above information be made available to the public and extend the comment period so that the public can submit additional comments on the Final Application.

**NRC Staff Response:**

Since the preliminary NRC staff finding was that Utah's alternative standard was equivalent to the NRC standard, the staff proposed and the Commission approved the parallel process. The staff has prepared an analysis of public comments for the alternative standard notice (see Attachment 2). The need for a final Commission determination on the alternative standard request was clearly stated in the NRC staff assessment as a condition of approval for the amended Agreement. If the Commission determines that the Utah alternative standard is equivalent or more stringent than the NRC standard, the amended Agreement would meet compatibility criteria and processing of the amendment to the Agreement would proceed.

**Summary of Comment:** The commenter presented an extensive (beginning on page 8 through page 25 of the comment letter) discussion on the definition of "ore" and how that

definition was being changed by the State of Utah through the commitment to follow NRC's guidance in RIS 2000-23.

**NRC Staff Response:**

The NRC staff respectfully disagrees with the underlying premise of this comment which is "that the definition of alternate feed material is a change in the statutory definition of "ore." The term "ore" is not defined in the Atomic Energy Act or UMTRCA. Therefore, the NRC staff in development of the alternate feed guidance considered the Webster's New Collegiate Dictionary, 1975 Edition, definition, which is:

"ore" - 1. a mineral containing a valuable constituent (as metal) for which it is mined and worked, 2. a source from which valuable matter is extracted.

When a "term of art," such as "ore," is not specifically defined in a statute or regulation, the implementing agency may use the common use or understanding of the term. The NRC staff in providing guidance on what is acceptable as an "ore" under UMTRCA essentially used the common definition as stated above with the additional clarification that alternate feed, a type of "ore," is processed for its source material content at a license uranium mill, the tailings or waste from the process are 11e.(2) byproduct material.

UMTRCA specifically uses the phrase "any ore" which means that the material being processed primarily for its source material content does not have to meet the definition of source material to be considered an "ore."

The NRC staff believes that the proposed Utah regulatory program for 11e.(2) byproduct material is consistent with the NRC program for the same activities.

**Summary of Comment:** The commenter requested that the State make it clear that environmental impacts include cumulative impacts of licensed activities, evaluation of all the alternatives to the proposed licensed activities, and evaluate environmental justice impacts, including impacts on the White Mesa Utes, Navajos, and low-income people.

**NRC Staff Response:**

The State regulations (R313-24-3(1)) have adopted the statutory requirement for States that regulate 11e.(2) byproduct material. The State may conduct additional evaluations if it desires. The National Environmental Policy Act (NEPA) is not a matter of compatibility for Agreement States and the State of Utah has met the requirements in UMTRCA.

**Summary of Comment:** The commenter in Section 5.2 of the commenter's letter requested that the State notice all amendment requests and requested clarification of terms in the licensing program description. The commenter requested that the State define in writing the criteria by which it will determine whether a proposed amendment will be considered a minor or major amendment.

**NRC Staff Response:**

The State of Utah practice of not noticing minor amendments is consistent with the NRC licensing practice. The clarifications requested in sections 5.23 and 5.24 of the NWC letter involve terms used in the description of major amendments and are appropriately used. The commenter requested clarification for how they would be used for minor amendments and the NRC staff believes that they are not being used by Utah for minor amendments. The State may chose to further document its licensing process, but the existing process is adequate for entering into the amended Agreement. The State's decision on minor and major amendments are subject to appeal under the State's administrative rules and adjudicatory process.

**Summary of Comment:** The commenter identified the Velvet Mine Water Treatment Facility as being dropped by the State and NRC from the uranium recovery program. The status of the Velvet Mine and possible 11e.(2) byproduct material at the site should be addressed by the State.

**NRC Staff Response:**

Mine water treatment facilities are not uranium mills under 10 CFR Part 40. They are considered side stream recovery (the concentration of uranium is a secondary purpose of the facility). Therefore, the waste from the side stream recovery is not 11e.(2) byproduct material. The Mine Water Treatment Facility has been licensed to possess the source material generated in the water treatment process and has been authorized to transfer the source material to the mills mentioned by the commenter for processing in the respective uranium mills. This type of process was one of the first alternate feed processes that were specifically approved by the NRC staff prior to the development of the guidance on alternate feed discussed earlier. Any contamination at the mine site, other than the source material handling equipment which is subject to source material release criteria, would be subject to the State's requirements for mine reclamation, not the requirements for uranium milling.

**Summary of Comment:** The commenter requests that the State and NRC make a serious and comprehensive effort to identify past regulatory program mistakes and failures in Utah, identify reasons for these mistakes, and failures, and propose solutions so that future regulatory programs do not lead to another incomplete and ineffective regulatory regime.

**NRC Staff Response:**

The NRC and the State are implementing the environmental standards established by EPA and public health and safety standards established by NRC. Because the condition at the sites predated the UMTRCA and the standards established thereunder, the concerns discussed by the commenter are issues that NRC has been working on for many years. The decision the Commission is required by statute to make is whether the State of Utah has a regulatory program for 11e.(2) byproduct material that is (1) compatible with the NRC program and (2) adequate to protect public health, safety, and the environment. Although no comprehensive review of past regulatory programs for 11e.(2) byproduct material has been explicitly conducted, NRC has and continues to review operational experience and historical practices and to reflect that experience in our rules, licensing and inspection guidance, and licensing and inspection actions.

**Summary of Comment:** Congress has never delegated to EPA or NRC the authority to regulate the processing of material other than "ore" at licensed uranium and thorium facilities under the Atomic Energy Act of 1946, as subsequently amended. The commenter asserts that because Congress has never delegated such responsibility to the NRC or the EPA, the NRC has no authority to transfer to the State of Utah the regulation of this type of uranium mill operation activity. The informal adoption of a policy by the State is not a means whereby the State can assume responsibility outside of the directives of Congress and outside of EPA and NRC regulation.

**NRC Staff Response:**

As discussed above, the NRC staff holds a different view on what constitutes an "ore" under UMTRCA. The NRC and the State of Utah are addressing the material and facilities covered under UMTRCA in the evaluation and execution of the proposed amended Agreement. The NRC has defined "alternate feed material" in RIS 2000-23 as "ore"; therefore, processing such material for its source material content produces 11e.(2) byproduct material. Both the processing and the management of the resulting wastes are covered under the proposed amended Agreement.

**Summary of Comment:** The commenter requested that the State submit an amended application that recognizes that the State has no authority over the processing of materials other than natural ore at licensed uranium or thorium processing facilities. The commenter also requested that the public promptly be provided with an opportunity to comment on an amended Final Application after the NRC responds to comments.

**NRC Staff Response:**

The Final Application, as currently amended in response to NRC comments (July 22, 2003), does not require modification to be acceptable to NRC. The commenter has raised several broad issues regarding the State's authority and the staff has addressed them in responses to other comments.

**Summary of Comment:** The commenter requested that the public also be provided an opportunity to comment on the Final Application after the NRC responds to the comments on the Alternative Standards proposal by Utah, the staff recommendations to the Commission, and the Commission's decision.

**NRC Staff Response:**

The NRC staff proposed and the Commission approved the parallel processing of the alternative groundwater standard and the evaluation of the Final Application and proposed amendment to the Utah Agreement. Both actions were published separately in the Federal Register requesting public comments on the staff's preliminary findings. In the draft staff assessment, the staff provided its preliminary finding to the Commission that the alternative groundwater standard was acceptable. The analysis of public comments received on the alternative groundwater standard and final staff recommendation are presented in the public comments analysis document for the alternative groundwater standard. If the alternative standard is not acceptable, then the Commission will not approve the amended Agreement.

## ASSESSMENT

of the proposed

### UTAH PROGRAM FOR THE REGULATION OF 11e.(2) BYPRODUCT MATERIALS<sup>1</sup>

as described in the

#### **Request for an Amended Agreement**

This assessment, prepared by the NRC staff, examines the proposed radiation control program of the State of Utah with respect to the ability of the program to regulate the possession, use, and disposal of 11e.(2) byproduct materials and the facilities that generate such material subject to the Atomic Energy Act of 1954 (Act), as amended. The assessment was performed using the criteria in the Commission's policy statement "Criteria for Guidance of States and NRC in Discontinuance of NRC Regulatory Authority and Assumption Thereof by States Through Agreement" (referred to below as the "criteria")<sup>2</sup> using an internal procedure (SA-700, Processing an Agreement) developed by the Office of State and Tribal Programs. Each criterion applicable to a program for 11e.(2) byproduct material and the NRC staff's assessment related thereto, is addressed separately below.

The staff did not evaluate the first 28 criteria which address the other radioactive material program requirements since Utah has been an Agreement State for those materials since 1984 as well as for low-level radioactive waste since 1990. The staff considered the last Integrated Materials Performance Evaluation Program (IMPEP) review which was satisfactory for all indicators to demonstrate that Utah has a program that meets these criteria. Therefore, the staff has only addressed the criteria for 11e.(2) byproduct material.

## OBJECTIVES

### ***Criteria for States Regulating Uranium or Thorium Processors and Wastes Resulting Therefrom After November 8, 1981***

29. **Authority. State statutes or duly promulgated regulations should be enacted, if not already in place, to make clear State authority to carry out the requirements or**

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<sup>1</sup>11e.(2) byproduct materials are those materials as defined in Section 11e.(2) of the Act and the facilities that generate such material over which regulatory authority may be transferred to a State under the provisions of Section 274.

<sup>2</sup>NRC Statement of Policy published in the Federal Register January 23, 1981 (46 FR 7540-7546), a correction was published July 16, 1981 (46 FR 36969) and a revision of Criterion 9 published in the Federal Register July 21, 1983 (48 FR 33376).

**Public Law 95-604, Uranium Mill Tailings Radiation Control Act (UMTRCA) as follows:**

- a. Authority to regulate the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content.**

The NRC staff review verified that Utah law authorizes the assumption of regulatory authority over "11e.(2) byproduct material" which is defined in the Radiation Control Act at 19-3-102(3) as "byproduct material" as defined in 42 U.S.C. Sec. 2014(e)(2), "the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content."

The Governor is authorized in Section 19-3-113 to enter into agreements with the Federal government providing for discontinuance of the Federal government's responsibilities with respect to sources of ionizing radiation and the assumption thereof by the State. The Utah Department of Environmental Quality, Division of Radiation Control, has been designated as the agency to carry out these responsibilities.

Staff notes that there are four NRC licensees in Utah currently authorized to conduct activity which produce or dispose of 11e.(2) byproduct material as defined in Section 11e.(2) of the Act, as amended.

References: Utah Radiation Control Act, Sections 19-3-104 and 19-3-113.

- b. That an adequate surety (under terms established by regulation) will be provided by the licensee to assure the completion of all requirements established by the (cite appropriate State agency) for the decontamination, decommissioning, and reclamation of sites, structures, and equipment used in conjunction with the generation or disposal of such byproduct material.**

The NRC staff review verified that Utah law authorizes the Radiation Control Board to adopt rules requiring financial assurance. The Board has adopted the NRC financial assurance requirements in Criteria 9 and 10 of Appendix A to 10 CFR Part 40 by reference in R313-24. The current financial assurances held by NRC for the four current NRC licensees will be transferred to the State of Utah as part of the license transfer process. On March 17, 2004, NRC staff notified three of the licensees that, upon execution of the amendment to the Agreement, they would need to submit to Utah updated financial assurance mechanisms specifying Utah as the beneficiary. The other licensee had already initiated such an update to its financial assurance mechanism.

Reference: Utah Radiation Control Act, Section 19-3-104(4)(d)(i) and Utah Administrative Code R313-24.

- c. If in the States' licensing and regulation of byproduct material or of any activity which produces byproduct material, the State collects funds from the licensee or its surety for long-term surveillance and maintenance of**

**such material, the total amount of the funds collected by the State shall be transferred to the U.S. if custody of the byproduct material and its disposal site is transferred to the Federal Government upon termination of the State license. (See 10 CFR 150.32.) If no default has occurred and the reclamation or other bonded activity has been performed, funds for the purpose are not to be transferred to the Federal Government. The funds collected by the State shall be sufficient to ensure compliance with the regulations the Commission establishes pursuant to Section 161X of the Atomic Energy Act.**

The NRC staff review verified that Utah law authorizes the promulgation of financial assurance requirements for 11e.(2) byproduct material and uranium mills. Utah adopted the NRC financial assurance requirements in Appendix A by reference which require the collection of funds for long-term surveillance. These regulations require that such funds must be transferred to the long-term custodian of the site prior to the State terminating the license.

References: Utah Code Annotated, 19-3-104(4)(d)(i); and Utah Administrative Code R313-24-4.

- d. In the issuances of licenses, an opportunity for written comments, public hearing (with transcript) and cross examination is required.**

See discussion under e. below.

- e. In the issuances of licenses, a written determination of the action to be taken based upon evidence presented during the public comment period and which is subject to judicial review is required.**

The NRC staff review determined that Utah, under the Radiation Control Act, requires a notice of the licensing action and opportunity for hearing in accordance with its Administrative Procedures in R313-17. R313-17 is based on and follows the Utah Administrative Procedures Act (UAPA), Section 63-46b-1 et seq. R313-17 provides an opportunity for written comment, as well as public hearing prior to the issuance or amendment of a license. New licenses and major amendments will be available for public comment for at least 30 days following publication of a notice. All licensing actions taken by the Division of Radiation Control may be appealed to the Radiation Control Board. All final decisions of the Radiation Control Board including licensing, enforcement, and rulemaking actions may be appealed within 30 days (UCA 63-46b-14) with the Utah Court of Appeals (UCA 63-46b-60).

References: Utah Radiation Control Act, 19-3; Utah Administrative Procedure Act, 63-46b; Utah Administrative Code, R313-17.

- f. A ban on major construction prior to completion of the written environmental analysis stipulated in Criterion 31.**

The NRC staff review verified that Utah has addressed banning commencement of construction prior to license issuance which includes a written environmental analysis in its regulations at R313-24-3(2).

Reference: Utah Administrative Code, R313-24.

**g. An opportunity shall be provided for public participation through written comments, public hearings, and judicial review of rules.**

In the State of Utah, all State agencies are required to use the State's administrative rulemaking procedures of the State Division of Administrative Rules. These procedures provide the general authority and process for public notice and comment and public hearings with regard to issuing rules or regulations. Section R15-1-9 states, "Persons may appeal the decision of the agency head or division by petitioning the district court for judicial review as provided by law." The Division of Radiation Control has implemented this in its regulations at R313-17.

References: Utah Administrative Code, R15-1, Administrative Rules, and R313-17, Administrative Procedures. Utah Code, 63-46b, Administrative Procedure Act.

30. Supporting Legislation. **In the enactment of any supporting legislation, the State should take into account the reservations of authority to the U.S. in UMTRCA as stated in 10 CFR 150.15a and summarized by the following:**

- a. **The establishment of minimum standards governing reclamation, long-term surveillance or maintenance, and ownership of the byproduct material.**
- b. **The determination that prior to the termination of a license, the licensee has complied with decontamination, decommissioning and reclamation standards, and ownership requirements for sites at which byproduct material is present.**
- c. **The requirement that prior to termination of any license for byproduct material, as defined in Section 11e.(2), of the Atomic Energy Act or for any activity that results in the production of such material, title to such byproduct material and the disposal site be transferred to the Federal Government or State at the option of the State, provided such option is exercised prior to termination of the license.**
- d. **The authority to require such monitoring, maintenance, and emergency measures after the license is terminated as necessary to protect the public health and safety for those materials and property for which the State has assumed custody pursuant to Pub. L. 95-604.**

- e. **The authority to permit use of the surface or subsurface estate, or both of the land transferred to the United States or State pursuant under provision of the Uranium Mill Radiation Tailings Control Act.**
- f. **The authority to exempt land ownership transfer requirements of Section 83(b)(1)(A).**

The NRC staff review verified that the Utah Administrative Code does not include the provisions reserved to the Nuclear Regulatory Commission in 10 CFR 150.15a. The NRC staff also verified that the regulatory requirements implementing requirements reserved to NRC in Appendix A to 10 CFR Part 40 were not adopted (see Section R313-24-4(c)). NRC staff concludes that Utah has not adopted any requirements reserved to NRC and, therefore, Utah meets the requirements of criterion 30.

References: Utah Administrative Code, Section R313-24-4(c).

31. Environmental Assessment. **It is preferable that State statutes contain the provisions of Section 6 of the Model Act. But the following may be accomplished by adoption of either procedures by regulation or technical criteria. In any case, authority for their implementation should be adequately supported by statute, regulation or case law as determined by the State Attorney General.**

**In the licensing and regulation of ores processed primarily for their source material content and for the disposal of byproduct material, procedures shall be established which provide a written analysis of the impact on the environment of the licensing activity. This analysis shall be available to the public before commencement of hearings and shall include:<sup>3</sup>**

- a. **An assessment of the radiological and nonradiological public health impacts;**
- b. **An assessment of any impact on any body of water or groundwater;**
- c. **Consideration of alternatives to the licensed activities; and**
- d. **Consideration of long-term impacts of licensed activities (see Item 36b. (1)).**

The NRC staff review verified that Utah has adopted a requirement (R3134-24-3(1)) that an environmental report be part of a license application for a new license, renewal, or major amendment. The environmental report must address all areas addressed in criterion 31. The analysis of these aspects will be included in the safety evaluation report for new or renewed licenses and in a statement of basis for major amendments. NRC staff concludes that the Utah program meets the requirements of criterion 31.

References: Utah Administrative Code, R313-24.

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<sup>3</sup>It is strongly recommended that a 30-day period be provided for public review.

32. **Regulations. State regulations should be reviewed for regulatory requirements, and where necessary incorporate regulatory language which is equivalent to the extent practicable or more stringent than regulations and standards adopted and enforced by the Commission, as required by Section 274o (see 10 CFR 40 and 10 CFR 150.31(b)).**

The NRC staff review verified that Utah has adopted applicable portions of 10 CFR Part 40 by incorporation by reference into R313-24. Utah has included 11e.(2) byproduct material disposal and uranium milling facility licensing and inspection actions under its basic licensing and inspection procedures as well as the specific requirements in R313-24. The NRC staff has reviewed all the Utah regulation changes to incorporate the requirements for 11e.(2) byproduct material and uranium milling in accordance with the Office of State and Tribal Procedures in SA-200 and SA-201.

The staff identified that Utah has adopted by reference Utah groundwater requirements that were different than the requirements in Appendix A to 10 CFR Part 40. These different requirements are being addressed as alternative standards under Section 274o of the Act. The staff prepared a Federal Register (FR) notice (68 FR 51516) which provides the notice and opportunity for hearing, through the notice and comment process, required in Section 274o. The comment period was extended (68 FR 60885) to allow 30 days following the availability, electronically, of two documents referenced in the August 27, 2003 FR notice. Comments were received from three individuals. NRC staff have analyzed the comments and the analysis is being provided to the Commission for a final determination on the alternative groundwater standards as required in Section 274o.

The NRC staff concludes that Utah meets the requirements of criterion 32 subject to the final determination by the Commission on the alternative groundwater standards.

References: Utah Administrative Code, R313-15, R313-17, R313-22, R313-70, and R313-24. SECY-03-0025 and COMSECY-03-0038. Federal Register notices 68 FR 51516 and 68 FR 60885.

33. **Organizational Relationships Within the States. Organizational relationships should be established which will provide for an effective regulatory program for uranium mills and mill tailings.**

- a. **Charts should be developed which show the management organization and lines of authority. This chart should define the specific lines of supervision from program management within the radiation control group and any other department within the State responsible for contributing to the regulation of uranium processing and disposal of tailings. When other State agencies or regional offices are utilized, the lines of communication and administrative control between the agencies and/or regions and the Program Director should be clearly drawn.**

The Utah Department of Environmental Quality, Division of Radiation Control, has been designated as the agency to carry out these responsibilities. The Low-Level Waste and

Environmental Monitoring Section within the Division of Radiation Control will be responsible for implementing the 11e.(2) byproduct material disposal and uranium milling program. The Radiation Control Board is responsible for issuance of all radioactive material licenses and issuance of all regulations implementing the Radiation Control Act (Utah Code Annotated (UCA) 19-3).

The Radiation Control Act (UCA 19-3) created the Radiation Control Board (Board) which is appointed by the Governor with advice and consent of the Senate and guides development of State radiation control policy and rules in the State. The Board members represent the various segments of the regulated community, the general public, and environmental interests. The Board typically meets on a monthly basis except February and July. The Board travels to various areas of Utah to be available to the licensees and the public. Board members are subject to the Utah Public Officers' and Employees' Ethics Act. Information regarding disclosure and conflict of interest for Board members was submitted as Appendix A to the amendment application. The Board has delegated its responsibility for issuance of licenses and enforcement actions to the Executive Secretary of the Board. The Executive Secretary of the Board typically is the Director of the Division of Radiation Control which is the current status. The Division of Radiation Control staff conduct the technical reviews and develop the proposed licenses or amendments for signature by the Director, Division of Radiation Control. The Director, Division of Radiation Control, is also an Executive Secretary for the Water Quality Board for the purposes of addressing water quality issues for uranium milling facilities and 11e.(2) byproduct material. At his time, the Division of Radiation Control does not intend to use other State organizations in their formal technical review process.

- b. Those States that will utilize personnel from other State Departments or Federal agencies in preparing the environmental assessment should designate a lead agency for supervising and coordinating preparation of this environmental assessment. It is normally expected that the radiation control agency in Agreement States will be the lead agency. The basic premise is that the lead agency is required to prepare the environmental assessment. Utilization of an applicant's environmental report in lieu of a lead agency assessment of the proposed project is not adequate or appropriate. However, the lead agency may prepare an environmental assessment based upon an applicant's environmental report. Other credible information may be utilized by the State as long as such information is verified and documented by the State.**

The Division of Radiation Control will be the lead agency for the preparation of environmental assessments for uranium milling and 11e.(2) byproduct material. The Division may use an outside consultant or contractor for technical review (science and engineering support) after the Division has the mutual consent of the licensee to pay reasonable expenses under Utah fee regulations. Legal assistance from the Attorney General's office is also available as needed. The Division recently informed NRC staff by telephone that they have entered into a new science and engineering support task order contract that can be utilized for low-level radioactive waste or 11e.(2) byproduct material (uranium milling) issues.

- c. **When a lead agency is designated, that agency should coordinate preparation of the statement. The other agencies involved should provide assistance with respect to their areas of jurisdiction and expertise. Factors relevant in obtaining assistance from other agencies include the applicable statutory authority, the time sequence in which the agencies become involved, the magnitude of their involvement, and relative expertise with respect to the project's environmental effects.**

**In order to bring an environmental assessment to a satisfactory conclusion, it is highly recommended that an initial scoping document be developed which clearly delineates the area and scope of work to be performed by each agency within a given time constraint.**

The Division's environmental review process does not involve other State organizations at this time. The consultant, if it is used, would be under the direct supervision of the Division staff. The Utah process does not follow the Federal process. The Federal process is not a matter of compatibility, but Utah must address the technical review areas and prepare a written environmental assessment. Utah will prepare its environmental assessment as part of the licensing review process and will make the assessment documentation available when it notices its proposed licensing action. The comments on the assessment will be addressed prior to issuing the final licensing action.

- d. **For those areas in the environmental assessment where the State cannot identify a State agency having sufficient expertise to adequately evaluate the proposal or prepare an assessment, the State should have provisions for obtaining outside consulting services. In those instances where non-governmental consultants are utilized, procedures should be established to avoid conflict of interest consistent with State law and administrative procedures.**

**Medical consultants recognized for their expertise in emergency medical matters, such as the Oak Ridge and Hanford National Laboratories, relating to the intake of uranium and its diagnosis thereof associated with uranium mining and milling should be identified and available to the State for advice and direct assistance.**

**During the budget preparation, the State should allow for funding costs incurred by the use of consultants. In addition, consultants should be available for any emergencies which may occur and for which their expertise would be needed immediately.**

In addition to the technical contract discussed above, Utah identified two possible medical consultants that could be used by Utah for the uranium milling program. The Division has budgeted for the science and engineering support contractor and has funds available for the other consultants if necessary. Expenses of the contract or consultants may be charged to specific licensees when prior arrangements have been made. The

contract has provisions to avoid conflicts of interest. The consultants and task order contract can both be utilized on short notice.

The NRC staff review determined that the provisions of criterion 33 have been addressed by the Utah program.

34. **Personnel. Personnel needed in the processing of the license application can be identified or grouped according to the following skills: Technical; Administrative; and Support.**

- a. **Administrative personnel are those persons who will provide internal guides, policy memoranda, reviews and managerial services necessary to assure completion of the licensing action. Support personnel are those persons who provide secretarial, clerical support, legal, and laboratory services. Technical personnel are those individuals who have the training and experience in radiation protection necessary to evaluate the engineering and radiological safety aspects of a uranium concentrator. Current indications are that 2 to 2.75 total professional person years' effort is needed to process a new conventional mill license, in situ license, or major renewal, to meet the requirements of UMTRCA. This number includes the effort for the environmental assessment and the in-plant safety review. It also includes the use of consultants. Heap leach applications may take less time and is expected to take 1.0 to 1.5 professional staff years' effort, depending on the circumstances encountered. Current indications are that the person years effort for support and legal services should be one secretary for approximately 2 conventional mills and ½ staff years for legal services for each non-contested mill case. The impact on environmental monitoring laboratory support services is difficult to estimate but should be added into the personnel requirements.**

**In addition, consideration should be given to various miscellaneous post-licensing ongoing activities including the issuance of minor amendments, inspections, and environmental surveillance. It is estimated that these activities may require about 0.5 to 1 person years effort per licensed facility per year, the latter being the case for a major facility. These figures do not include manpower for Title I activities of UMTRCA.**

- b. **In evaluating license applications the State shall have access to necessary specialities, e.g., radiological safety, hydrology, geology and dam construction and operation.**

**In addition to the personnel qualifications listed in the "Guide for Evaluation of State Radiation Control Programs," Revision 3, February 1, 1980, the regulatory staff involved in the regulatory process (Radiation) should have additional training in Uranium Mill Health Physics and Environmental Assessments.**

- c. Personnel in agencies other than the lead agency are included in these total person year numbers. If other agencies are counted in these numbers then it shall be demonstrated that these personnel will be available on a routine and continuing basis to a degree claimed as necessary to successfully comply with the requirements of UMTRCA and these criteria. The arrangements for making such resources available shall be documented, such as an interagency memorandum of understanding and confirmed by budgetary cost centers.**

The NRC will be transferring four licenses to Utah. One operational mill, one commercial 11e.(2) byproduct material disposal facility, and two conventional mills in reclamation with approved reclamation plans. Based on the above criteria, the NRC staff estimates that Utah would need about 4-5 technical and support staff to conduct the licensing, including environmental assessment, and inspection activities for these four facilities.

Utah performed a staffing analysis which identified the need for four staff (three technical and one support) to conduct the 11e.(2) byproduct material (uranium milling) program. The staffing analysis included licensing casework (new, renewals, and amendments including environmental assessments), inspections, regulation and guidance updates, and contingency resources for unplanned actions. Utah intends to use the existing technical staff for initial implementation of the uranium milling program. The technical staff in the uranium milling program would include a hydrologist, an engineer, and a health physicist. Support staff would include an office technician and legal support as needed. Management of the uranium milling program would be under the direction of the Low-Level Waste and Environmental Monitoring Section Manager. Utah intends to hire three new staff (health physicist, engineer, and office technician) to supplement the existing staff. The new staff will also assist other programs, as needed.

The Utah staffing analysis identified the type (hydrology, engineering, and health physics) and appropriate number of staff needed to administer the licensing and inspection program for 11e.(2) byproduct material. Utah identified at least two existing staff members that are qualified for each technical area needed. The Utah staff have been working with NRC staff during the time that NRC has been regulating these facilities and have gained experience in uranium milling operations. The Utah staff have previously conducted environmental assessments similar to that appropriate for uranium milling in their licensing of the commercial low-level waste disposal site. They have also conducted reviews of and commented on NRC assessments for the uranium milling facilities. The Division also has a technical assistance contractor that may assist the Division as necessary.

The NRC staff review of the Utah staff qualifications determined that there currently is a sufficient number of trained staff to administer the 11e.(2) byproduct materials (uranium milling) program. Utah has indicated that current technical staff will be used to initially implement the 11e.(2) byproduct material activities. Utah will hire three new staff and train them to conduct the activities in the uranium milling program. The Utah fee schedule for uranium milling facilities goes into effect upon entering into the amended Agreement and these fees will be used to support the three new positions. Although the

new staff will be hired just before the transfer of authority to Utah, the Utah program has sufficient existing qualified staff to implement the 11e.(2) byproduct material activities. The new staff will be trained and be assigned to activities in the Program as they are qualified. Utah stated that the impact to the existing Program of using existing staff until the new staff is fully trained is anticipated to be minimal. Utah completed the hiring for the office technician, a health physicist and an engineer. All staff will be on board prior to signing of the amendment to the Agreement.

The NRC staff review of Utah's needs analysis, current staff qualifications, and current staff assignments for 11e.(2) byproduct material activities determined that the provisions of criterion 34 for the number staff and qualifications of those staff were addressed by the Utah program. The NRC staff determined that the Utah program has an adequate number of staff and sufficient technical expertise to implement the proposed amended Agreement for 11e.(2) byproduct material.

35. **Functions To Be Covered. The States should develop procedures for licensing, inspection, and preparation of environmental assessments.**
- a. **Licensing**
- (1) **Licensing evaluations or assessments should include in-plant radiological safety aspects in occupational or restricted areas and environmental impacts to populations in unrestricted areas from the plant.**
- (2) **It is expected that the State will review, evaluate and provide documentation of these evaluations. Items which should be evaluated are:**
- (a) **Proposed activities;**
  - (b) **Scope of proposed action;**
  - (c) **Specific activities to be conducted;**
  - (d) **Administrative procedures;**
  - (e) **Facility organization and radiological safety responsibilities, authorities, and personnel qualifications;**
  - (f) **Licensee audits and inspections;**
  - (g) **Radiation safety training programs for workers;**
  - (h) **Radiation safety program, control and monitoring;**
  - (i) **Restricted area markings and access control;**
  - (j) **At existing mills, review of monitoring data, exposure records, licensee audit and inspection records, and other records applicable to existing mills;**
  - (k) **Environmental monitoring;**
  - (l) **Emergency procedures, radiological;**
  - (m) **Product transportation; and**
  - (n) **Site and physical decommissioning procedures, other than tailings.**
  - (o) **Employee exposure data and bioassay programs.**

Utah will use its Technical Procedures for License Review as well as NRC guidance in the form of Standard Review Plans and Regulatory Guides in the conduct of its licensing program. These procedures and guidance documents include evaluation of the areas listed above. Utah has previously licensed, including the preparation of an environmental assessment for, a commercial low-level waste disposal site with similar waste management practices to those at uranium milling facilities.

**b. Environmental Assessment**

**(1) The environmental evaluation should consist of a detailed and documented evaluation of the following items:**

- (a) Topography;**
- (b) Geology;**
- (c) Hydrology and water quality;**
- (d) Meteorology;**
- (e) Background radiation;**
- (f) Tailings retention system;**
- (g) Interim stabilization, reclamation, and Site Decommissioning Program;**
- (h) Radiological Dose Assessment;**
  - (1) Source terms**
  - (2) Exposure pathway**
  - (3) Dose commitment to individuals**
  - (4) Dose commitment to populations**
  - (5) Evaluation of radiological impacts to the public to include a determination of compliance with State and Federal regulations and comparisons with background values**
  - (6) Occupational dose**
  - (7) Radiological impact to biota other than man**
  - (8) Radiological monitoring programs, pre-occupational and operational**
- (i) Impacts to surface and groundwater, both quality and quantity;**
- (j) Environmental effects of accidents; and**
- (k) Evaluation of tailings management alternatives in terms of regulations.**

**(2) The States are encouraged to examine the need to expand the scope of the assessment into other areas such as:**

- (a) Ecology;**
- (b) Environmental effects of site preparation and facility construction on environment and biota;**
- (c) Environmental effects of use and discharge of chemicals and fuels; and**
- (d) Economic and social effects.**

Section R313-24.3 of the Utah Administrative Code requires the licensee to submit an environmental report that will be reviewed and evaluated by the licensing staff as part of the licensing process. The staff evaluation will be documented in the environmental assessments. The areas of review cover all the areas listed above in (1) and for new facilities, the areas listed above in (2).

**c. Inspections**

- (1) As a minimum, items which should be inspected or included during the inspection of a uranium mill should adhere to the items evaluated in the in-plant safety review. The principal items recommended for inspection are:**
  - (a) Administration;**
  - (b) Mill circuit, including any additions, deletions, or circuit changes;**
  - (c) Accidents/Incidents;**
  - (d) Part 19 or equivalent requirements of the State;**
  - (e) Action taken on previous findings;**
  - (f) A mill tour to determine compliance with regulations, and license conditions;**
  - (g) Tailings waste management in accordance with regulations and license conditions (see NRC Reg. Guide 3.11.1);**
  - (h) Records;**
  - (i) Respiratory protection in accordance with license conditions or 10 CFR Part 20.**
  - (j) Effluent and environmental monitoring;**
  - (k) Training programs;**
  - (l) Transportation and shipping;**
  - (m) Internal review and audit by management;**
  - (n) Exit interview; and**
  - (o) Final written report documenting the results of the inspection and findings on each item.**
- (2) In addition, the inspector should perform the following:**
  - (a) Independent surveys and sampling.**
- (3) Additional guidance is contained in appropriate NRC regulatory and inspection guides. A complete inspection should be performed at least once per year.**

The Utah uranium milling program will consist of four facilities. Envirocare which is west of Salt Lake City and three facilities in southern Utah. The Envirocare 11e.(2) disposal facility will be incorporated into the overall Envirocare oversight and inspection program now in use for the low-level waste disposal site. The uranium milling health physicist will inspect each facility in southern Utah at least quarterly. This schedule will be adjusted based on the facility status and compliance history. This health physicist will also be responsible for the inspection of the 28 other licensees in southern Utah. The engineer and groundwater hydrologist will provide inspection support as needed in such areas as

groundwater sampling evaluations, split groundwater sampling, oversight of new engineering construction and oversight of closed facilities.

The Utah inspection program for uranium milling facilities will incorporate all the elements of the current materials inspection program and include the above areas. A complete inspection will be performed at least annually and will include independent surveys and sampling. The NRC inspection form for Uranium Mills as well as the NRC Inspection Manual Chapter 2801, "Uranium Mill and 11e.(2) Byproduct Material Disposal Site and Facility Inspection Program," will be used as guidance documents by Utah inspectors. Enforcement actions will be in accordance with Utah Radiation Control Rules and existing enforcement guidance. All enforcement actions may be appealed through the Utah Radiation Control Board and thereafter, to the appropriate court.

**d. Operational Data Review**

- (1) In addition to the reporting requirements required by the regulations or license conditions, the licensee will submit in writing to the regulatory agency within 60 days after January 1 and July 1 of each year, reports specifying the quantity of each of the principal radionuclides released to unrestricted areas in liquid and in gaseous effluents during the previous six months of operation. This data shall be reported in a manner that will permit the regulatory agency to confirm the potential annual radiation doses to the public.**
  
- (2) All data from the radiological and non-radiological environmental monitoring program will also be submitted for the same time periods and frequency. The data will be reported in a manner that will allow the regulatory agency to conform the dose to receptors.**

The Division staff will perform operational data reviews of the semi-annual radioactive material effluent reports as well as the semi-annual environmental monitoring reports. The licensee is required to specify the quantity of each of the principle radionuclides released to unrestricted areas in both liquid and gaseous effluents during the previous six months of operation (R313-24-4, incorporates 10 CFR 40.65 by reference). The data for the effluent releases will be required in a manner that will permit the Utah staff to confirm the potential annual radiation doses to the public and confirm the dose to receptors.

The NRC staff review determined that the provisions of criterion 35 are addressed by the Utah program. In general, Utah has adopted NRC regulations by reference or adopted equivalent requirements, and committed to using the NRC guidance in conducting its regulatory program. The staff concludes that the Utah program satisfies the requirements of criterion 35.

36. Instrumentation. The State should have available both field and laboratory instrumentation sufficient to ensure the licensee's control of materials and to validate the licensee's measurements.

- a. The State will submit its list of instrumentation to the NRC for review. Arrangements should be made for calibrating such equipment.
- b. Laboratory-type instrumentation should be available in a State agency or through a commercial service which has the capability for quantitative and qualitative analysis of radionuclides associated with natural uranium and its decay chain, primarily; U-238, Ra-226, Th-232, Pb-210, and Rn-222, in a variety of sample media such as will be encountered from an environmental sampling program.

Analysis and data reduction from laboratory analytical facilities should be available to the licensing and inspection authorities in a timely manner. Normally, the data should be available within 30 days of submittal. State acceptability of quality assurance (QA) programs should also be established for the analytical laboratories.

- c. Arrangements should also be completed so that a large number of samples in a variety of sample media resulting from a major accident can be analyzed in a time frame that will allow timely decisions to be made regarding public health and safety.
- d. Arrangements should be made to participate in the Environmental Protection Agency quality assurance program for laboratory performance.

The Utah program submitted a list of instruments that are sufficient in number and for the types of field and laboratory instruments needed to implement a uranium milling program (Appendix F of Utah application). The instruments are calibrated at least annually and semi-annually for those used in the materials program (calibration procedures in Appendix F of Utah application). The Division has laboratory instruments for sample analysis as well as the capability at the State Health Laboratory which is sufficient for routine qualitative and quantitative analysis of radionuclides associated with natural uranium and its decay chain in a variety of sample media. In addition, the Division has the capability to contract commercially for analyses of samples when necessary. In the case of a major accident, the State Health Laboratory could perform a large number of sample analyses. If the State Health Laboratory capability is exceeded, the State Health Laboratory may have to contract a commercial laboratory for a timely turn around. The State Health Laboratory participates in the National Environmental Laboratory Accreditation Program and maintains its own quality assurance program. The Environmental Protection Agency's program for laboratory performance is no longer available.

The staff concludes that the Utah program satisfies the requirements of criterion 36.

## STAFF CONCLUSION

Section 274d of the Atomic Energy Act of 1954, as amended, states that "The Commission shall enter into an agreement under subsection b of this section with any State if:

- (1) The Governor of that State certifies that the State has a program for the control of radiation hazards adequate to protect the public health and safety with respect to the materials within the State covered by the proposed agreement, and that the State desires to assume regulatory responsibility for such materials; and
- (2) The Commission finds that the State program is in accordance with the requirements of subsection o. and in all other respects compatible with the Commission's program for the regulation of such materials, and that the State program is adequate to protect the public health and safety with respect to the materials covered by the proposed amendment."

The NRC staff has reviewed the proposed Agreement, the certification of Utah Governor Leavitt, and the supporting information provided by the staff of the Division of Radiation Control, Utah Department of Environmental Quality, and concludes that the State of Utah satisfies the criteria in the Commission's policy statement "Criteria for Guidance of States and NRC in Discontinuance of NRC Regulatory Authority and Assumption Thereof by States Through Agreement," and therefore meets the requirements of Section 274 of the Act. The proposed Utah program to regulate 11e.(2) materials, as comprised of statutes, regulations, procedures, and apparatus, is compatible with the program of the Commission and is adequate to protect public health, safety, and the environment with respect to the materials covered by the proposed amendment to the Agreement.

**NUCLEAR REGULATORY COMMISSION**

**State of Utah: Final Determination on Proposed  
Alternative Groundwater Standards for 11e.(2) Byproduct Material**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Notice of Final Commission Determination under Section 274o of the Atomic Energy Act of 1954, as amended; State of Utah Proposed Alternative Groundwater Standards.

**SUMMARY:** This notice is announcing that on July ??, 2004, the Nuclear Regulatory Commission (NRC) made the determination required by section 274o of the Atomic Energy Act of 1954, as amended (Act) for Agreement State proposed alternative standards for 11e.(2) byproduct material. The Commission has determined that the State of Utah proposed alternative groundwater standards will achieve a level of stabilization and containment of the sites concerned, and a level of protection for public health, safety, and the environment from radiological and non-radiological hazards associated with such sites, which is equivalent to, to the extent practicable, or more stringent than the level which would be achieved by standards and requirements adopted and enforced by the Commission for the same purpose and any final standards promulgated by the Administrator of the Environmental Protection Agency in accordance with section 275 of the Act. This notice completes the notice and public hearing process required in section 274o of the Act for proposed State alternative standards.

**FOR FURTHER INFORMATION CONTACT:** Dennis M. Sollenberger, Office of State and Tribal Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Telephone (301) 415-2819 or e-mail [DMS4@nrc.gov](mailto:DMS4@nrc.gov).

**SUPPLEMENTARY INFORMATION:** The Commission approved a similar process to that specified at 10 CFR Part 2, Subpart H to fulfill both provisions for notice and for opportunity for public hearing required by section 274o of the Act. The Commission published a notice and opportunity for public hearing in the Federal Register on the State of Utah's proposed alternative groundwater standards for a 30-day comment period (68 FR 51516, August 27, 2003). On October 24, 2003, the Commission published a clarification of the notice and opportunity for public hearing in the August 27, 2003 notice, noticed the electronic availability of two documents referenced in the earlier notice, and extended the comment period for an additional 30 days (68 FR 60885). The public comment period ended on November 24, 2003. The Commission received three comment letters on Utah's alternative groundwater standards proposal (ML032750048, ML032820353, and ML033420067) and one letter with supplements on the Commission's alternative standards determination process (ML032720672, ML032750048, and ML033140034). The NRC staff prepared a letter response dated June 21, 2004 (ML041770014) to the commenter on the Commission's process for notice and opportunity for public hearing for State alternative standards.

The NRC staff prepared an analysis of comments for the comments received on Utah's proposed alternative groundwater standards (ML041940322). One commenter did not object to Utah's alternative groundwater regulations; however, the commenter said the discharge permit discussions on implementation is the test of the standards. Another commenter stated that the Utah's proposed alternative groundwater standards were equivalent or more stringent than the NRC and EPA groundwater standards. The third commenter raised concerns with NRC's past implementation of its groundwater standards and wants Utah to implement a more rigorous

groundwater protection program. No deficiencies in Utah's proposed alternative groundwater standards were identified by the commenters.

The Commission considered the information provided in SECY-03-025 (ML032901045) which included the State of Utah comparison between Utah's proposed alternative groundwater standards and NRC's standards, and the NRC staff's initial determination that Utah's proposed alternative groundwater standards are equivalent to or more stringent than the NRC groundwater standards. The Commission considered the comments submitted in response to the August 27 and October 24, 2003 Federal Register notices and the NRC staff's analysis of the comments, and the NRC staff's recommendation that the Commission approve a final determination that Utah's alternative groundwater standards meet the requirements in section 274o of the Act. On July [ ], 2004, the Commission made a determination that Utah's alternative groundwater standards are equivalent to or more stringent than the NRC's groundwater standards for 11e.(2) byproduct material.

The documents referenced above and publicly available documents created or received at the NRC after November 1, 1999, are available electronically at the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>. From this site, the public can gain entry into the NRC's Agencywide Document Access and Management System (ADAMS), which provides text and image files of NRC's public documents. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC Public Document Room (PDR) Reference staff at 1-800-397-4209, 301-415-4737 or by e-mail to [pdr@nrc.gov](mailto:pdr@nrc.gov).

Dated at Rockville, Maryland, this      day of July, 2004.

For the Nuclear Regulatory Commission.

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Annette L. Vietti-Cook,  
Secretary of the Commission.

**DRAFT**

The Honorable Olene S. Walker  
Governor of Utah  
Salt Lake City, Utah 84114-0601

Dear Governor Walker:

I am pleased to inform you that the U.S. Nuclear Regulatory Commission (NRC) has approved the proposed amendment to the Agreement requested by former Governor Michael O. Leavitt. Under the amendment to the Agreement, NRC will discontinue, and the State of Utah will assume, regulatory authority over the possession and use of 11e.(2) byproduct material, including the facilities that generate such material.

Enclosed are three formal copies of the amendment to the Agreement for your signature. After signature, one copy should be retained by you office, and the other two copies should be mailed to Paul H. Lohaus, Director, Office of State and Tribal Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

The Commission appreciates your interest in expanding Utah's participation in the Agreement State Program, and looks forward to continuing the excellent relationship that exists between the NRC and the State of Utah.

Sincerely,

Nils J. Diaz

Enclosures:  
As stated

cc: Dane Finerfrock, Director  
Division of Radiation Control  
Department of Environmental Quality

**ATTACHMENT 6**

**NUCLEAR REGULATORY COMMISSION**

**State of Utah: Discontinuance of Certain Commission Regulatory Authority Within the State; Notice of Amendment to Agreement Between the Nuclear Regulatory Commission and the State of Utah**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Notice of Amendment to the Agreement Between NRC and the State of Utah.

**SUMMARY:** This notice is announcing that on July ??, 2004, Dr. Nils J. Diaz, Chairman of the U.S. Nuclear Regulatory Commission (NRC) and on July ??, 2004, Governor Olene S. Walker of the State of Utah signed an amendment to the Agreement between the NRC and the State of Utah as authorized by section 274b of the Atomic Energy Act of 1954, as amended (Act). The amendment to the Agreement provides for the Commission to discontinue its regulatory authority and for Utah to assume regulatory authority over the possession and use of byproduct material as defined in section 11e.(2) of the Act. Under the amendment to the Agreement, a person in Utah possessing this material is exempt from certain Commission regulations. The exemptions have been previously published in the Federal Register (FR) and are codified in the Commission's regulations at 10 CFR Part 150. The amendment to the Agreement (Appendix A) is published as required by section 274e of the Act.

**FOR FURTHER INFORMATION CONTACT:** Dennis M. Sollenberger, Office of State and Tribal Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Telephone (301) 415-2819 or e-mail [DMS4@nrc.gov](mailto:DMS4@nrc.gov).

**ATTACHMENT 7**

**SUPPLEMENTARY INFORMATION:** The draft amendment to the Agreement was published in the Federal Register (FR) for comment once a week for four consecutive weeks (see e.g., 69 FR 7026; February 12, 2004) as required by the Act. The public comment period ended on March 15, 2004. The Commission received one comment letter (ML040780577 and ML040780567) which was addressed by the NRC staff. The commenter raised questions on Utah's adoption of the NRC policy allowing alternate feed materials to be processed at uranium mills, on proceeding with the amendment to the Agreement while the Commission is considering the proposed alternative groundwater standards, and on several other issues dealing with specific NRC past actions and what approach Utah should take in the future in implementing the amendment to the Agreement. The NRC staff analyzed these comments and prepared responses to them (ML041940326). The NRC staff determined that the comments received do not affect the NRC staff's assessment which finds the Utah 11e.(2) byproduct materials program adequate to protect public health, safety, and environment, and compatible with the NRC's program. Thus, Utah meets NRC's criteria for an Agreement for 11e.(2) byproduct material. The proposed Utah amendment to the Agreement is consistent with Commission policy and thus, meets the criteria for an 11e.(2) amendment to the Agreement with the Commission.

After considering the request for an amendment to the Agreement by the Governor of Utah, the supporting documentation submitted with the request for the amendment to the Agreement, and the interactions with the staff of the Utah Division of Radiation Control, Department of Environmental Quality, the NRC staff completed an assessment of the Utah 11e.(2) byproduct materials program. A copy of the NRC staff assessment was made available in the NRC's PDR and electronically on NRC's web site. Based on the documents submitted by

Utah, the NRC staff's analysis of comments, and the NRC staff's assessment, the Commission determined on July ??, 2004, that the proposed Utah 11e.(2) byproduct material program is adequate to protect public health, safety, and the environment, and that it is compatible with the Commission's program.

Documents referred to in this notice and other publicly available documents created or received at the NRC after November 1, 1999, are also available electronically at the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>. From this site, the public can gain entry into the NRC's Agencywide Document Access and Management System (ADAMS), which provides text and image files of NRC's public documents. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC Public Document Room (PDR) Reference staff at 1-800-397-4209, 301-415-4737 or by e-mail to [pdrr@nrc.gov](mailto:pdrr@nrc.gov).

Dated at Rockville, Maryland, this      day of August, 2004.

For the Nuclear Regulatory Commission.

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Annette L. Vietti-Cook,  
Secretary of the Commission.

## APPENDIX A

### AMENDMENT TO AGREEMENT BETWEEN THE UNITED STATES NUCLEAR REGULATORY COMMISSION AND THE STATE OF UTAH FOR DISCONTINUANCE OF CERTAIN COMMISSION REGULATORY AUTHORITY AND RESPONSIBILITY WITHIN THE STATE PURSUANT TO SECTION 274 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED

WHEREAS, the United States Nuclear Regulatory Commission (hereinafter referred to as the Commission) entered into an Agreement on March 29, 1984 (hereinafter referred to the Agreement of March 29, 1984) with the State of Utah under Section 274 of the Atomic Energy Act of 1954, as amended (hereafter referred to the Act) which became effective on April 1, 1984, providing for discontinuance of the regulatory authority of the Commission within the State under Chapters 6, 7, and 8 and Section 161 of the Act with respect to byproduct materials as defined in Section 11e.(1) of the Act, source materials, and special nuclear materials in quantities not sufficient to form a critical mass; and

WHEREAS, the Commission entered into an amendment to the Agreement of March 29, 1984 (hereinafter referred to as the Agreement of March 29, 1984, as amended) pursuant to the Act providing for discontinuance of regulatory authority of the Commission with respect to the land disposal of source, byproduct, and special nuclear material received from other persons which became effective on May 9, 1990; and

WHEREAS, the Governor requested, and the Commission agreed, that the Commission reassert Commission authority for the evaluation of radiation safety information for sealed sources or devices containing byproduct, source or special nuclear materials and the registration of the sealed sources or devices for distribution, as provided for in regulations or orders of the Commission; and

WHEREAS, the Governor of the State of Utah is authorized under Utah Code Annotated 19-3-113 to enter into this amendment to the Agreement of March 29, 1984, as amended, between the Commission and the State of Utah; and

WHEREAS, the Governor of the State of Utah has requested this amendment in accordance with Section 274 of the Act by certifying on January 2, 2003 that the State of Utah has a program for the control of radiological and non-radiological hazards adequate to protect the public health and safety and the environment with respect to byproduct material as defined in Section 11e.(2) of the Act and facilities that generate this material and that the State desires to assume regulatory responsibility for such material; and

WHEREAS, the Commission found on [date] that the program of the State for the regulation of materials covered by this amendment is in accordance with the requirements of the Act and in all other respects compatible with the Commission's program for the regulation of byproduct material as defined in Section 11e.(2) and is adequate to protect public health and safety; and

WHEREAS, the State and the Commission recognize the desirability and importance of cooperation between the Commission and the State in the formulation of standards for protection against hazards of radiation and in assuring that the State and the Commission programs for protection against hazards of radiation will be coordinated and compatible; and

WHEREAS, this amendment to the Agreement of March 29, 1984, as amended, is entered into pursuant to the provisions of the Act.

NOW, THEREFORE, it is hereby agreed between the Commission and the Governor of the State, acting on behalf of the State, as follows:

Section 1. Article I of the Agreement of March 29, 1984, as amended, is amended by adding a new paragraph B and renumbering paragraphs B through D as paragraphs C through E. Paragraph B will read as follows:

“B. Byproduct materials as defined in Section 11e.(2) of the Act;”

Section 2. Article II of the Agreement of March 29, 1984, as amended, is amended by deleting paragraph E and inserting a new paragraph E to implement the reassertion of Commission authority over sealed sources and devices to read:

“E. The evaluation of radiation safety information on sealed sources or devices containing byproduct, source, or special nuclear materials and the registration of the sealed sources or devices for distribution, as provided for in regulations or orders of the Commission.”

Section 3. Article II of the Agreement of March 29, 1984, as amended, is amended by numbering the current Article as A by placing an A in front of the current Article language. The subsequent paragraphs A through E are renumbered as paragraphs 1 through 5. After the current amended language, the following new Section B is added to read:

“B. Notwithstanding this Agreement, the Commission retains the following authorities pertaining to byproduct material as defined in Section 11e.(2) of the Act:

1. Prior to the termination of a State license for such byproduct material, or for any activity that resulted in the production of such material, the Commission shall have made a determination that all applicable standards and requirements pertaining to such material have been met;
  
2. The Commission reserves the authority to establish minimum standards governing reclamation, long-term surveillance or maintenance, and ownership of such byproduct material and of land used as a disposal site for such material. Such reserved authority includes:
  - a. The authority to establish terms and conditions as the Commission determines necessary to assure that, prior to termination of any license for such byproduct material, or for any activity that results in the production of such material, the licensee shall comply with decontamination, decommissioning, and reclamation standards prescribed by the Commission; and with ownership requirements for such materials and its disposal site;
  
  - b. The authority to require that prior to termination of any license for such byproduct material or for any activity that results in the production of such material, title to such byproduct material and its disposal site be transferred to the United States or the State of Utah at the option of the State (provided such option is exercised prior to termination of the license);

- c. The authority to permit use of the surface or subsurface estates, or both, of the land transferred to the United States or the State pursuant to 2.b. in this Section in a manner consistent with the provisions of the Uranium Mill Tailings Radiation Control Act of 1978, as amended, provided that the Commission determines that such use would not endanger public health, safety, welfare, or the environment.
  
- d. The authority to require, in the case of a license for any activity that produces such byproduct material (which license was in effect on November 8, 1981), transfer of land and material pursuant to paragraph 2.b. in this Section taking into consideration the status of such material and land and interests therein, and the ability of the licensee to transfer title and custody thereof to the United States or the State;
  
- e. The authority to require the Secretary of the Department of Energy, other Federal agency, or State, whichever has custody of such byproduct material and its disposal site, to undertake such monitoring, maintenance, and emergency measures as are necessary to protect public health and safety, and other actions as the Commission deems necessary; and
  
- f. The authority to enter into arrangements as may be appropriate to assure Federal long-term surveillance or maintenance of such byproduct material and its disposal site on land held in trust by the United States for any Indian Tribe or land owned by an Indian Tribe and subject to a restriction against alienation imposed by the United States.”

Section 4. Article IX of the 1984 Agreement, as amended, is renumbered as Article X and a new Article IX is inserted to read:

“ARTICLE IX

In the licensing and regulation of byproduct material as defined in Section 11e.(2) of the Act, or of any activity which results in the production of such byproduct material, the State shall comply with the provisions of Section 274o of the Act. If in such licensing and regulation, the State requires financial surety arrangements for reclamation and or long-term surveillance and maintenance of such byproduct material:

- A. The total amount of funds the State collects for such purposes shall be transferred to the United States if custody of such byproduct material and its disposal site is transferred to the United States upon termination of the State license for such byproduct material or any activity that results in the production of such byproduct material. Such funds include, but are not limited to, sums collected for long-term surveillance or maintenance. Such funds do not, however, include monies held as surety where no default has occurred and the reclamation or other bonded activity has been performed; and
  
- B. Such surety or other financial requirements must be sufficient to ensure compliance with those standards established by the Commission pertaining to bonds, sureties, and financial arrangements to ensure adequate reclamation and long-term management of such byproduct material and its disposal site.”

This amendment shall become effective on [insert date] and shall remain in effect unless and until such time as it is terminated pursuant to Article VIII of the Agreement of March 29, 1984, as amended.

Done at Rockville, Maryland, in triplicate, this [day] day of [month, year].

FOR THE UNITED STATES  
NUCLEAR REGULATORY COMMISSION

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Nils J. Diaz, Chairman

Done at Salt Lake City, Utah, in triplicate, this [day] day of [month, year].

FOR THE STATE OF UTAH

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Olene S. Walker, Governor